FILE NOTATIONS

| | | | |
|---|---|---|---|
| Entered in N I D File | ✓ | Checked by Chief | ✓ |
| Entered on S R Sheet | ✓ | Copy N I D to Field Office | ✓ |
| Location Map Pinned | ✓ | Approval Letter | ✓ |
| Card Indexed | ✓ | Disapproval Letter | |
| I W R for State or Fee Land | | | |

COMPLETION DATA:

| | | | |
|---|---|---|---|
| Date Well Completed | 9-21-57 | Location Inspected | |
| OW | WW | TA | Bond released State of Fee Land |
| GW | OS | PA ✓ | |

LOGS FILED

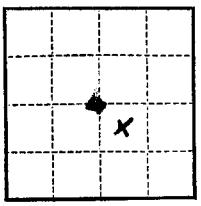
Driller's Log 1-8-58

Electric Logs (No. ) 3

E | I (✓) | E-I | GR | GR-N ✓ | Micro ✓

Lat | Mi-L | Sonic | Others

Form 9-331 b
(April 1952)



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R359.4,
Approval expires 12-31-60.

Indian Agency Navajo

Allottee Tribal Lands

Lease No. 14-20-603-242

# SUNDRY NOTICES AND REPORTS ON WELLS

| | | | |
|---|---|---|---|
| NOTICE OF INTENTION TO DRILL | X | SUBSEQUENT REPORT OF WATER SHUT-OFF | |
| NOTICE OF INTENTION TO CHANGE PLANS | | SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING | |
| NOTICE OF INTENTION TO TEST WATER SHUT-OFF | | SUBSEQUENT REPORT OF ALTERING CASING | |
| NOTICE OF INTENTION TO REDRILL OR REPAIR WELL | | SUBSEQUENT REPORT OF REDRILLING OR REPAIR | |
| NOTICE OF INTENTION TO SHOOT OR ACIDIZE | | SUBSEQUENT REPORT OF ABANDONMENT | |
| NOTICE OF INTENTION TO PULL OR ALTER CASING | | SUPPLEMENTARY WELL HISTORY | |
| NOTICE OF INTENTION TO ABANDON WELL | | | |

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

July 2, 19 57

Well No. Mule Hill #1 is located 2691 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 4

SE 4 (¼ Sec. and Sec. No.) | 41S (Twp.) | 23E (Range) | SLBM (Meridian)

Wildcat (Field) | San Juan (County or Subdivision) | Utah (State or Territory)

The elevation [illegible] is 4646 ft. (approx. ground)

## DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

1. Drill 11" hole to 1150'±.
2. Cement 8-5/8" casing at 1150'± with 250 sacks pozmix and 100 sacks construction cement.
3. Drill 7-7/8" hole to 5700'±.
4. If commercial production is obtained a supplementary completion notice will be issued, otherwise, plug and abandon in accordance with U.S.G.S regulations.

Surface formation is the Morrison.

* Approved 7-3-57.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address 108 North Behrend Avenue

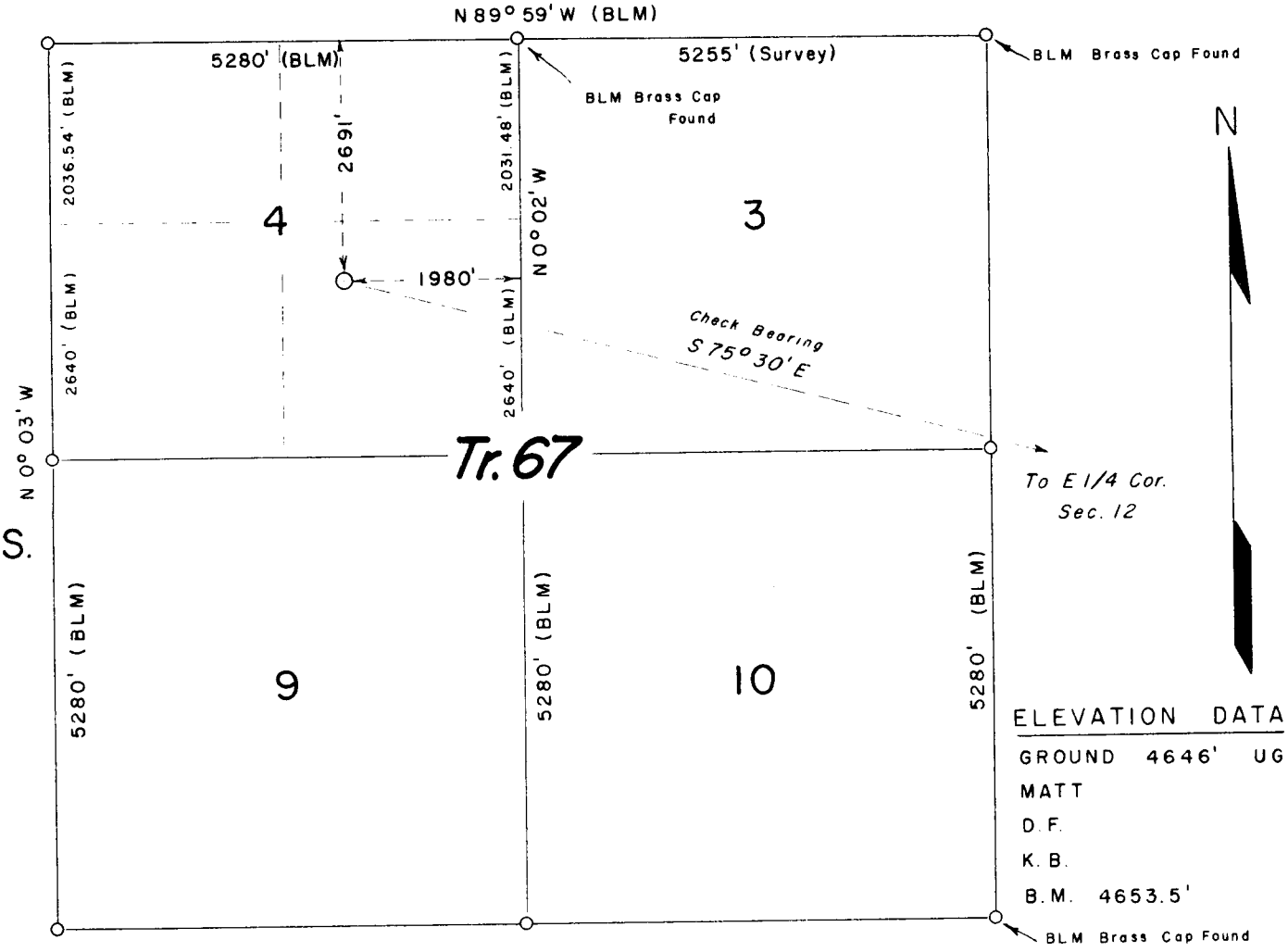
Farmington, New Mexico

By B W Shepard
B. W. Shepard

Title Exploitation Engineer

U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8

.23E. S.L.M.




## REFERENCE POINT DATUM –

1" x 2" stakes set at 10' N., S., E., & W. of Loc.
1" x 2" stake and 3' flag set at 350' E., 165' W., & 178' S. of Loc.
1" x 2" hub and 10' flag set at Loc. being 2691' S., and 1980' W. of the NE Cor. of Sec. 4, T. 41 S., R. 23 E., SLM.
A cross chiseled in sandstone ledge bears North 240' from Loc. for RP and BM.
Elevations hereon are in reference to triangulation station "Pete", checked into our elevation circuit in the Recapture Creek Field.

This is to certify that the above plat was prepared from field notes of actual surveys made under my supervision, and that the same are true and correct to the best of my knowledge and belief.

John A. Krueger

John A. Krueger, Reg. L.S.
Utah Reg. No. 1648

| | | |
|---|---|---|
| Drawn By: Ritter<br>Checked By: JAK<br>Date: 6/29/57 | SHELL OIL COMPANY | Scale 1" = 2000' |

LOCATION OF MOLE HILL No. 1

SAN JUAN COUNTY, UTAH, Tr. 67, SEC. 4, T. 41 S., R. 23 E., S.L.M.

Form 9-331 b
(April 1952)

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

Navajo
Indian Agency

Tribal Lands
Allottee

14-20-603-242
Lease No.

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

# SUNDRY NOTICES AND REPORTS ON WELLS

| | | | |
|---|---|---|---|
| NOTICE OF INTENTION TO DRILL | X | SUBSEQUENT REPORT OF WATER SHUT-OFF | |
| NOTICE OF INTENTION TO CHANGE PLANS | | SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING | |
| NOTICE OF INTENTION TO TEST WATER SHUT-OFF | | SUBSEQUENT REPORT OF ALTERING CASING | |
| NOTICE OF INTENTION TO REDRILL OR REPAIR WELL | | SUBSEQUENT REPORT OF REDRILLING OR REPAIR | |
| NOTICE OF INTENTION TO SHOOT OR ACIDIZE | | SUBSEQUENT REPORT OF ABANDONMENT | |
| NOTICE OF INTENTION TO PULL OR ALTER CASING | | SUPPLEMENTARY WELL HISTORY | |
| NOTICE OF INTENTION TO ABANDON WELL | | | |

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

July 2, 19 57

Well No. Mole Hill #1 is located 2691 ft. from [N] line and 1980 ft. from [E] line of sec. 4

SE 4 (¼ Sec. and Sec. No.) | 41S (Twp.) | 23E (Range) | SLBM (Meridian)

Wildcat (Field) | San Juan (County or Subdivision) | Utah (State or Territory)

The elevation ~~of the derrick floor above sea level~~ is 4646 ft. (approx. ground)

## DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

1. Drill 11" hole to 1150'±.
2. Cement 8-5/8" casing at 1150'± with 250 sacks posso mix and 100 sacks construction cement.
3. Drill 7-7/8" hole to 5700'±.
4. If commercial production is obtained a supplementary completion notice will be issued, otherwise, plug and abandon in accordance with U.S.G.S regulations.

Surface formation is the Morrison.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

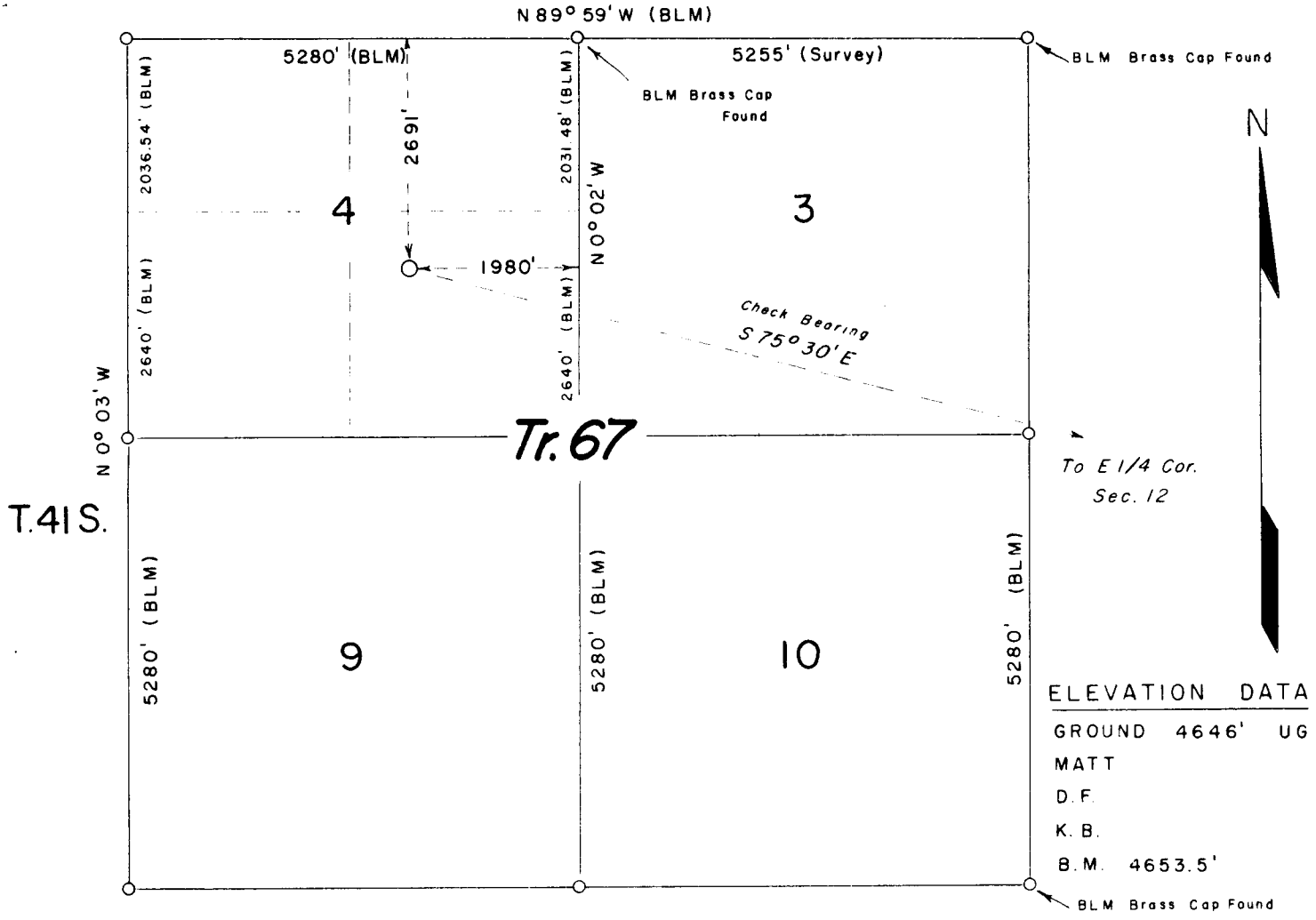
Address 108 North Behrend Avenue

Farmington, New Mexico

By B W Shepard
B. W. Shepard

Title Exploitation Engineer

U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8




## REFERENCE POINT DATUM—

1" x 2" stakes set at 10' N.,S.,E., & W. of Loc.
1" x 2" stake and 3' flag set at 350' E., 165' W., & 178' S. of Loc.
1" x 2" hub and 10' flag set at Loc. being 2691' S., and 1980' W. of the NE Cor. of Sec. 4, T. 41 S., R. 23 E., SLM.
A cross chiseled in sandstone ledge bears North 240' from Loc. for RP and BM.
Elevations hereon are in reference to triangulation station "Pete", checked into our elevation circuit in the Recapture Creek Field.

This is to certify that the above plat was prepared from field notes of actual surveys made under my supervision, and that the same are true and correct to the best of my knowledge and belief.

John A. Kroeger

John A. Kroeger, Reg. L.S.
Utah Reg. No. 1648

| | | |
|---|---|---|
| Drawn By: Ritter<br>Checked By: JAK<br>Date: 6/29/57 | SHELL OIL COMPANY | Scale 1" = 2000' |

LOCATION OF MOLE HILL No. 1

SAN JUAN COUNTY, UTAH, Tr. 67, SEC. 4, T. 41 S., R. 23 E., S.L.M.

July 3, 1957

Shell Oil Company
108 North Behrend Avenue
Farmington, New Mexico

Gentlemen:

This is to acknowledge receipt of your notice of intention to drill Well No. Mole Hill 1, which is to be located 2691 feet from the north line and 1980 feet from the east line of Section 4, Township 41 South, Range 23 East, SLBM, San Juan County, Utah.

The proposed location of this well does not comply with Rule C-3(b), General Rules and Regulations and Rules of Practice and Procedure, of the Oil and Gas Conservation Commission, State of Utah; nor has information been furnished for an unorthodox location as required by Rule C-3(c) of said rules and regulations.

Therefore, before approval can be given for the drilling location of this well, it will be necessary for you to file a new notice of intention to drill in compliance with Rule C-3(b), or if an unorthodox location is necessary, a request for such spacing must be made as required by Rule C-3(c).

Yours very truly,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FEIGHT
SECRETARY

CBF:cn

cc: Phil McGrath/ Jerry Long
U.S.G.S. Farmington,
New Mexico

July 5, 1957

Shell Oil Company
108 North Behrend Ave
Farmington, New Mexico

Attn: B. W. Shepard

Gentlemen:

With regards to our telephone conversation of this date, please be advised that, insofar as this office is concerned, approval to drill Well No. Mole Hill 1 2691 feet from the north line and 1980 feet from the east line of section 4, Township 41 South, Range 23 East, SLBM, San Juan County, Utah, is hereby granted.

Yours very truly,

OIL & GAS CONSERVATION COMMISSION

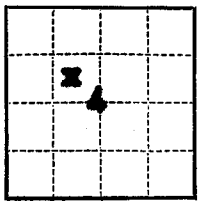
CLEON B FEIGHT
SECRETARY

CBF:en

cc: Phil McGrath, District Eng
USGS Farmington, New Mexico

Form 9-331 b
(April 1952)

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency Navajo

Allottee Tribal Lands

Lease No. 14-20-603-242

Noted
Card
8-14-57

# SUNDRY NOTICES AND REPORTS ON WELLS

| | | | |
|---|---|---|---|
| NOTICE OF INTENTION TO DRILL | | SUBSEQUENT REPORT OF WATER SHUT-OFF | |
| NOTICE OF INTENTION TO CHANGE PLANS | | SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING | |
| NOTICE OF INTENTION TO TEST WATER SHUT-OFF | | SUBSEQUENT REPORT OF ALTERING CASING | |
| NOTICE OF INTENTION TO REDRILL OR REPAIR WELL | | SUBSEQUENT REPORT OF REDRILLING OR REPAIR | |
| NOTICE OF INTENTION TO SHOOT OR ACIDIZE | | SUBSEQUENT REPORT OF ABANDONMENT | |
| NOTICE OF INTENTION TO PULL OR ALTER CASING | | SUPPLEMENTARY WELL HISTORY | X |
| NOTICE OF INTENTION TO ABANDON WELL | | | |

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

August 6, 19 57

Well No. Mole Hill #1 is located 2691 ft. from {N} line and 1980 ft. from {E} line of sec. 4

NW 4 (¼ Sec. and Sec. No.) | 41S (Twp.) | 23E (Range) | SLBM (Meridian)

Wildcat (Field) | San Juan (County or Subdivision) | Utah (State or Territory)

The elevation [illegible] is 4646 ft. (Approx. ground)

## DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

(Spudded 7-24-57)

7-27,28-57 Ran and cemented 8-5/8", 32#, J-55 casing at 1079' with 200 sacks Pozmix and 175 sacks treated cement. Good returns to surface. Flanged up and waited on cement. Pressure tested BOP and casing with 700 psi. for 15 minutes, OK.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address 101 South Behrend

Farmington, New Mexico

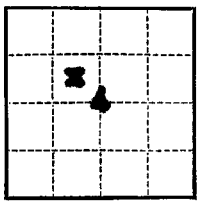
By B W Shepard
B. W. Shepard

Title Exploitation Engineer

U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8

Form 9-331 b
(April 1952)

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency Navajo

Allottee Tribal Lands

Lease No. 14-20-603-242

Noted conf 8-14-57

# SUNDRY NOTICES AND REPORTS ON WELLS

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| NOTICE OF INTENTION TO DRILL | | SUBSEQUENT REPORT OF WATER SHUT-OFF | |
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| NOTICE OF INTENTION TO ABANDON WELL | | | |

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

August 6, 19 57

Well No. Mole Hill #1 is located 2691 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 4

| NW 4 | 41S | 23E | SLBM |
|---|---|---|---|
| (¼ Sec. and Sec. No.) | (Twp.) | (Range) | (Meridian) |

| Wildcat | San Juan | Utah |
|---|---|---|
| (Field) | (County or Subdivision) | (State or Territory) |

The elevation [illegible] is 4646 ft. (Approx. ground)

## DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

(Spudded 7-24-57)

7-27,28-57 Ran and cemented 8-5/8", 32#, J-55 casing at 1079' with 200 sacks Pozmix and 175 sacks treated cement. Good returns to surface. Flanged up and waited on cement. Pressure tested BOP and casing with 700 psi. for 15 minutes, OK.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address 101 South Behrend

Farmington, New Mexico

By B W Shepard
B. W. Shepard

Title Exploitation Engineer

U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8

Form 9-331 b
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Allottee Tribal Lands

Lease No. 14-20-603-242

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| NOTICE OF INTENTION TO PULL OR ALTER CASING | | SUPPLEMENTARY WELL HISTORY | X |
| NOTICE OF INTENTION TO ABANDON WELL | | | |

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

September 18, 1957

Mole Hill
Well No. #1 is located 2691 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 4

NW 4 (¼ Sec. and Sec. No.) | 41S (Twp.) | 23E (Range) | SLBM (Meridian)

Wildcat (Field) | San Juan (County or Subdivision) | Utah (State or Territory)

The elevation of the Kelly Bushing above sea level is 4670 ft.

## DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

DST #1 5539-5560 Initial shut in 30 minutes. 2 hour flow period; 1 hour final shut in. Faint blow decreasing to dead at end of 2 hours. Rec. 100'(0.5 bbl) drilling mud. ISIP 1250, IFP 100, FFP 150, FSIP 1250, HP 2600.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address 101 South Behrend

Farmington, New Mexico

By B. W. Shepard

B. W. Shepard

Title Exploitation Engineer

U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8

Form 9-331 b
(April 1952)

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency Navajo

Allottee Tribal Lands

Lease No. 14-20-603-242

# SUNDRY NOTICES AND REPORTS ON WELLS

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| NOTICE OF INTENTION TO PULL OR ALTER CASING | | SUPPLEMENTARY WELL HISTORY | X |
| NOTICE OF INTENTION TO ABANDON WELL | | | |

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

September 18, 1957

Mole Hill
Well No. #1 is located 2691 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 4

| NW 4 | 41S | 23E | SLBM |
|---|---|---|---|
| (¼ Sec. and Sec. No.) | (Twp.) | (Range) | (Meridian) |

| Wildcat | San Juan | Utah |
|---|---|---|
| (Field) | (County or Subdivision) | (State or Territory) |

The elevation of the Kelly Bushing above sea level is 4670 ft.

## DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

DST #1 5539-5560 Initial shut in 30 minutes. 2 hour flow period; 1 hour final shut in. Faint blow decreasing to dead at end of 2 hours. Rec. 100' (0.5 bbl) drilling mud. ISIP 1250, IFP 100, FFP 150, FSIP 1250, HP 2600.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

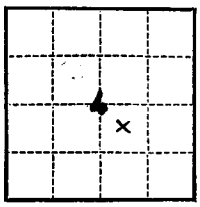
Address 101 South Behrend

Farmington, New Mexico

By B. W. Shepard
B. W. Shepard
Title Exploitation Engineer

U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8

Form 9-331 b
(April 1952)



Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency Navajo

Allottee Tribal Lands

Lease No. 14-20-603-242

Note
10-7-57

# SUNDRY NOTICES AND REPORTS ON WELLS

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| NOTICE OF INTENTION TO PULL OR ALTER CASING | | SUPPLEMENTARY WELL HISTORY | |
| NOTICE OF INTENTION TO ABANDON WELL | X | | |

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

September 19, 1957

Hole Hill
Well No. #1 is located 2691 ft. from {N} line and 1980 ft. from {E} line of sec. 4

NW 4 (¼ Sec. and Sec. No.) | 41 S (Twp.) | 23 E (Range) | SLBM (Meridian)

Wildcat (Field) | San Juan (County or Subdivision) | Utah (State or Territory)

Kelly bushing
The elevation of the ~~derrick floor~~ above sea level is 4670.5 ft.

## DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Status: Total Depth - 5701'
Casing - 8 5/8" at 1079'
Hole Size 7 7/8", 1079 to Total depth

Proposed Work:

1. Place plugs through open end drill pipe as follows:
   a. 5350' with 35 sacks cement (5250-5350)
   b. 4500' with 35 sacks cement (4400-4500)
   c. 2400' with 35 sacks cement (2300-2400)
   d. 1088' with 60 sacks cement (shoe of surface casing)
2. Feel for top plug.
3. Place 10 sack cement plug at surface, install marker and abandon in accordance with USGS regulations.

Verbal approval to abandon— Mr Long, USGS to B. W. Shepard, 9-19-57.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company [illegible] COMPANY

Address 101 S Behrend

Farmington, New Mexico

By B. W. Shepard
B. W. Shepard

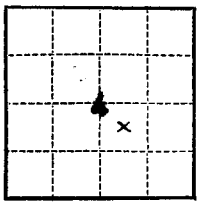
Title Exploitation Engineer

U. S. GOVERNMENT PRINTING OFFICE 16—8437b-3

W/

Form 9-331 b
(April 1952)

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.



*(SUBMIT IN TRIPLICATE)*

**UNITED STATES**
**DEPARTMENT OF THE INTERIOR**
**GEOLOGICAL SURVEY**

Indian Agency Navajo

Allottee Tribal Lands

Lease No. 14-20-603-242

# SUNDRY NOTICES AND REPORTS ON WELLS

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| NOTICE OF INTENTION TO PULL OR ALTER CASING | | SUPPLEMENTARY WELL HISTORY | |
| NOTICE OF INTENTION TO ABANDON WELL | X | | |

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

September 19, 1957

Well No. Mole Hill #1 is located 2691 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 4

NW 4 (¼ Sec. and Sec. No.) | 41 S (Twp.) | 23 E (Range) | SLM (Meridian)

Wildcat (Field) | San Juan (County or Subdivision) | Utah (State or Territory)

The elevation of the Kelly bushing above sea level is 4670.5 ft.

## DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Status: Total Depth - 5701'
Casing - 8 5/8" at 1079'
Hole Size 7 7/8", 1079 to Total Depth

Proposed Work:

1. Place plugs through open end drill pipe as follows:
   a. 5350' with 35 sacks cement (5250-5350)
   b. 4500' with 35 sacks cement (4400-4500)
   c. 2400' with 35 sacks cement (2300-2400)
   d. 1088' with 60 sacks cement (shoe of surface casing)
2. Feel for top plug.
3. Place 10 sack cement plug at surface, install marker and abandon in accordance with U. S. regulations.

Verbal approval to abandon -- Mr Lon, USGS to R. W. Shepard, 9-18-57.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Mole Hill Oil Company

Address 101 S Behrend

Farmington, New Mexico

By R W Shepard
R. W. Shepard

Title Exploitation Engineer

OK 10-7-57

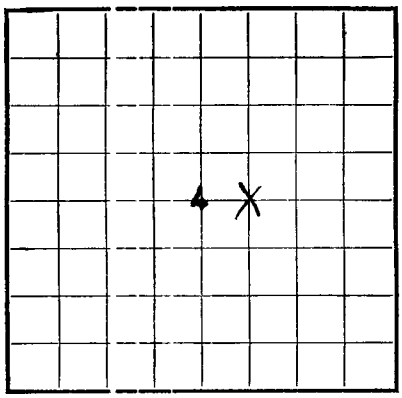
U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8

Form 9-331

eau No. 42-R355.4.
xpires 12-31-60.

U. S. LAND OFFICE Window Rock, Ariz.
SERIAL NUMBER 14-20-603-242
LEASE OR PERMIT TO PROSPECT —

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



LOCATE WELL CORRECTLY

# LOG OF OIL OR GAS WELL

Company Shell Oil Company Address 101 S. Behrend, Farmington, N.M.

Lessor or Tract Tribal Lands Field Wildcat State Utah

Well No Mole Hill #1 Sec. 4 T. 41S R. 23E Meridian SLBM County San Juan

Location 2691 ft. {N./S.} of N Line and 1980 ft. {E./W.} of E Line of Sec. 4 Elevation 4637.5 KB
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed B. W. Kilpatrick

Date November 20, 1957 Title Exploitation Engineer

The summary on this page is for the condition of the well at above date.

Commenced drilling July 24, 19 57 Finished drilling September 19, 19 57

## OIL OR GAS SANDS OR ZONES

(*Denote gas by G*)

No. 1, from — to — No. 4, from None to —

No. 2, from — to — No. 5, from — to —

No. 3, from — to — No. 6, from — to —

## IMPORTANT WATER SANDS

No. 1, from — to — No. 3, from None to —

No. 2, from — to — No. 4, from — to —

## CASING RECORD

| Size casing | Weight per foot | Threads per inch | Make | Amount | Kind of shoe | Cut and pulled from | Perforated From— | Perforated To— | Purpose |
|---|---|---|---|---|---|---|---|---|---|
| 8-5/8" | 32 | 8 | — | 1079 | Baker | — | — | — | Surface |

## MUDDING AND CEMENTING RECORD

| Size casing | Where set | Number sacks of cement | Method used | Mud gravity | Amount of mud used |
|---|---|---|---|---|---|
| 8-5/8" | 1079 | 200 pozzo mix 4% gel | Displacement | — | — |

## PLUGS AND ADAPTERS

Heaving plug—Material — Length — Depth set —

Adapters—Material — Size —

## SHOOTING RECORD

FOLD | MARK

| | | | | | | |
|---|---|---|---|---|---|---|
| 8-5/8" | 1079 | 200 pozzo mix 1/5C | Displacement | - | - | |

## PLUGS AND ADAPTERS

Heaving plug—Material ____ Length ____ Depth set ____

Adapters—Material ____ Size ____

## SHOOTING RECORD

| Size | Shell used | Explosive used | Quantity | Date | Depth shot | Depth cleaned out |
|---|---|---|---|---|---|---|
| | | | None | | | |

## TOOLS USED

Rotary tools were used from 0 feet to 5705 feet, and from - feet to - feet

Cable tools were used from - feet to - feet, and from - feet to - feet

## DATES

Abandoned as dry hole

September 21, 19 57

Put to producing ____, 19____

The production for the first 24 hours was ____ barrels of fluid of which ____% was oil; ____% emulsion; ____% water; and ____% sediment.

Gravity, °Bé. ____

If gas well, cu. ft. per 24 hours ____ Gallons gasoline per 1,000 cu. ft. of gas ____

Rock pressure, lbs. per sq. in. ____

## EMPLOYEES

T. W. Keen, Driller

T. F. Manion, Driller

Exeter Drilling Company

N. A. Sheppard, Driller

____, Driller

## FORMATION RECORD

| FROM— | TO— | TOTAL FEET | FORMATION |
|---|---|---|---|
| 1420 | 2196 | 776 | Chinle |
| 2196 | 2300 | 104 | Shinarump |
| 2300 | 2415 | 115 | Moenkopi |
| 2415 | 4442 | 2027 | Cutler |
| 4442 | 5496 | 1054 | Hermosa |
| 5496 | | | Paradox |

[OVER]

1—43094-4

16—43094-2 U. S. GOVERNMENT PRINTING OFFICE

## HISTORY OF OIL OR GAS WELL

**It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.**

**Attached: Drilling History**
**Core Record**
**Ditch Sample Description**

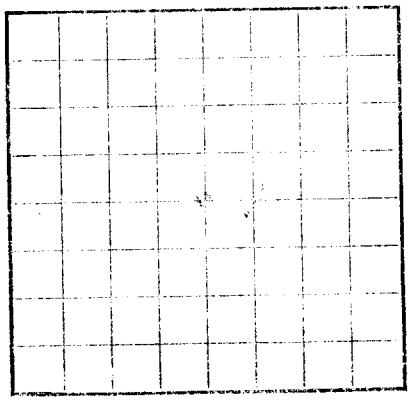
LOG OF OIL OR GAS WELL

GEOLOGICAL SURVEY

DEPARTMENT OF THE INTERIOR

UNITED STATES

LOCATE WELL CORRECTLY



FORM 9-330

PD 4-B 8-50

WEEK ENDING_____

CORE FROM_____ TO_____

CORES EXAMINED BY_____

**SHELL OIL COMPANY**

# CORE RECORD

AREA OR FIELD Wild Cat Area

COMPANY Shell

LEASE AND WELL NO. Mole Hill #1

| NO. | FROM | TO | RECOV-ERED | FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE | SYMBOL | OBSERVED DIP | CORE INDICATION OIL—GAS / CORE OR DIT |
|---|---|---|---|---|---|---|---|
| 1 | 5361 | 5412 | 51' | | | | See Desc |
| | 5361 | 5362 | 1' | Limestone, light tan, III-F-MA. | | | |
| | 5362 | 5363 | 1' | Limestone, tan, IVF-LA, sandy in part, with fossile fragments, trace fluorescence on 60% calcareous filled fracture. | | | |
| | 5363 | 5364 | 1' | Limestone, tan, I VF-LA, rare brachiopod fragments, stylolitic, trace fluorescence on vertical hairline fractures. | | | |
| | 5364 | 5365 | 1' | Limestone, as above, sandy, no fractures. | | | |
| | 5365 | 5367 | 2' | Limestone, tan, I VFA, rare brachiopod. | | | |
| | 5367 | 5368 | 1' | Limestone, as above, very fine, pyritic inclusions. | | | |
| | 5368 | 5369 | 1' | Limestone, like 65-67, stylolitic. | | | |
| | 5369 | 5371 | 2' | Limestone, as above, not stylolitic. | | | |
| | 5371 | 5373 | 2' | Limestone, as above, rare brachiopod, stylolitic. | | | |
| | 5373 | 5375 | 2' | Limestone, tan, III VF-LA, appears recrystallized with many crystalline calcareous fusulinid. | | | |
| | 5375 | 5376 | 1' | Limestone, light brown, I VFA, with rare crinoid column. | | | |
| | 5376 | 5378 | 2' | Limestone, tan, I VF-MA, sandy. | | | |
| | 5378 | 5379 | 1' | Limestone, tan, I VFA. | | | |
| | 5379 | 5380 | 1' | limestone, light brown, I VFA, with abundant brachiopod, crinoid and bryoz fragments. | | | |
| | 5380 | 5381 | 1' | Limestone, light brown, I VFA, slightly sandy, with occasional bryozoa, trace spotty bright yellow fluorescence. | | | |
| | 5381 | 5383 | 2' | Limestone, tan, I VFA, sandy. | | | |
| | 5383 | 5390 | 7' | Limestone, as above, not sandy. | | | |
| | 5390 | 5394 | 4' | Limestone, tan, I - III VFA, with occasional fossile fragments. | | | |
| | 5394 | 5396 | 2' | Limestone, tan, I VFA, silty - sandy. | | | |
| | 5396 | 5397 | 1' | Limestone, tan, I VFA, with abundant crinoid fragments. | | | |
| | 5397 | 5399 | 2' | Limestone, as above, with rare brachiopod. | | | |
| | 5399 | 5402 | 3' | Limestone, brown, I VFA, very fusulinid. | | | |
| | 5402 | 5403 | 1' | Limestone, dark brown, I VF-LA, with abundant small brachiopods. | | | |
| | 5403 | 5404 | 1' | Limestone, dark brown, I VFA, with thin (1") black shale parting. 5% spotty bright yellow fluorescence and cut fluorescence. | | | |
| | 5404 | 5405 | 1' | Limestone, dark brown, I VFA, stylolitic, recrystallized in part, with occasional brachiopod. | | | |
| | 5405 | 5406 | 1' | Limestone, brown, I VF-MA, as above. | | | |
| | 5406 | 5407 | 1' | Limestone, brown, I VFA, silty, with black cherty nodules. | | | |
| | 5407 | 5408 | 1' | Limestone, brown, I-III VFA, sandy, with rare fossile fragments. 75% large spotty pale-bright yellow Fluorescence, CF, strong petroleum odor. | | | |

SYMPOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

PD 4A .2-50 PRINTED IN U. S. A.

**SHELL OIL COMPANY**

Mole Hill
WELL NO. 1

Wildcat
(FIELD)
San Juan, Utah
(COUNTY)

**DRILLING REPORT**
FOR PERIOD ENDING
8-18-57

H 1-7-58

4
(SECTION OR LEASE)
T41S R23E
(TOWNSHIP OR RANCHO)

| DAY | DEPTHS FROM | DEPTHS TO | REMARKS |
|---|---|---|---|
| 57 | | | |
| | | | Location: 2691' S and 1980' W of NE Corner, Section 4, T41S, R23E, SLBM, San Juan County, Utah. |
| | | | Elevations: KB 4637.50<br>GR 4625.85<br>DF 4635.75 |
| 7-24 to 7-27 | 0 | 1095 | Spudded 12:01 AM 7-24-57. Ran and cemented 8-5/8", 32#, J-55 casing at 1079' with 200 sacks pozzo mix and 150 sacks cement treated with 2% calcium chloride. Good cement returns to surface. Flanged up. |
| 7-28 | 1095 | - | Waited on cement. |
| 7-29 to 7-30 | 1095 | | Repaired washed out water pump (San Juan River) and lines. |
| 7-31 | 1095 | 1566 | Drilled 471'. Pressure tested casing and BOP with 700 psi for 30 minutes, OK. Located top of cement 1059'. Lost circulation between 1224-1566' ?, regained with lost circulation material. |
| 8-1 to 8-5 | 1566 | 2418 | Drilled 852'. |
| 8-6 to 8-7 | 2418 | 2655 | Drilled 237'. Waited on water and repaired water pump. |
| 8-8 to 8-10 | 2655 | 3289 | Drilled 634'. |
| 8-11 to 8-12 | 3289 | 3345 | Drilled 56'. Waited on water, repaired rig. |
| 8-13 to 8-18 | 3345 | 3921 | Drilled 576'. |

**CONDITION AT BEGINNING OF PERIOD**

| HOLE SIZE | HOLE FROM | HOLE TO | CASING SIZE | DEPTH SET |
|---|---|---|---|---|
| | | | | |

DRILL PIPE SIZES

C. Mac Master
SIGNED

PD 4A 2-50 PRINTED IN U. S. A.

**SHELL OIL COMPANY**

Mole Hill
WELL NO. 1

Wildcat
(FIELD)

# DRILLING REPORT
FOR PERIOD ENDING
9-20-57

4
(SECTION OR LEASE)

San Juan, Utah
(COUNTY)

T41S R23E
(TOWNSHIP OR RANCHO)

| DAY 57 | DEPTHS FROM | DEPTHS TO | REMARKS |
|---|---|---|---|
| 8-19 | 3921 | 3948 | Drilled 27'. Waited on water, installed new water pump. |
| 8-20 to 8-28 | 3948 | 4733 | Drilled 785'. Lost 1 cone, drilled on junk with 2 bits, ran magnet. (4011 - 4115'). |
| 8-29 to 8-31 | 4733 | 4750 | Drilled 17'. Shut down - roads washed out. |
| 9-1 to 9-6 | 4750 | 5277 | Drilled 527'. |
| 9-7 to 9-10 | 5277 | 5457 | Drilled 82'. Cored 95.5'. Core #1 5361-5411. Recovered 50', Core #2 5411-5457.5 Recovered 40.5'. |
| 9-11 | 5460 | - | Repairing rig, (depth correction). |
| 9-12 to 9-17 | 5460 | 5656 | Cored 196'. Core #3 5460-5510, recovered 47.5'. Core #4 5510-5560 recovered 50'. Core #5 5560-5612 recovered 52'. Core #6 5612-5656 recovered 41'. Ran Induction - Electrical Survey and Microlog. |
| 9-18 | 5656 | - | DST #1 5540 - 5660. Cook testers, 2 - 6-5/8" packers at 5540 and 5535, 2 pressure recorders 1 Amerada at 5653 and 1 Amerada at 5658', 1/2" subsurface bean, 3/4" surface bean, tool initially shut in 30 minutes, open 2 hours, final shut in 1 hour. Used 31' (0.15 bbls.)air cushion. Very faint blow decreasing to almost dead at end of test. Recovered 100' (0.5 bbl.) mud, salinity 6600 - 11,302 (t) ppm NaCl, salinity before test 10,065 (t) ppm NaCl. ISIP 1250, IFP 100, FFP 150, FSIP 1250 (still rising), HP 2600. |
| 9-19 | 5656 | 5705 | Drilled 55'. Ran Gamma Ray Neutron Log and Velocity Survey (DEPTH CORRECTION) |
| 9-20 | 5705 | TD | Plugged as follows:<br>With drill pipe at 5350 plugged with 35 sacks cement.<br>With drill pipe at 4500 plugged with 35 sacks cement.<br>With drill pipe at 2400 plugged with 35 sacks cement.<br>With drill pipe at 1085 plugged with 60 sacks cement. |

**CONDITION AT BEGINNING OF PERIOD**

| HOLE SIZE | HOLE FROM | HOLE TO | CASING SIZE | DEPTH SET |
|---|---|---|---|---|
| | | | | |

DRILL PIPE SIZES

C MAC MASTER
SIGNED

PD 4A 2-50 PRINTED IN U. S. A.

**SHELL OIL COMPANY**

Mole Hill
WELL NO. 1

Wildcat
(FIELD)

# DRILLING REPORT
FOR PERIOD ENDING
9-21-57

4
(SECTION OR LEASE)

San Juan, Utah
(COUNTY)

T41S R23E
(TOWNSHIP OR RANCHO)

| DAY | DEPTHS FROM | DEPTHS TO | REMARKS |
|---|---|---|---|
| 57 | | | |
| 9-21 | | | Ran in located plug at 1050', waited 12 hours found hard cement at 975'. Installed marker with a 10 sack cement plug and abandoned 9-21-57. (Released rig 10:00 P.M. 9-21-57).<br><br>Checked BOP Daily<br><br>Mud Summary<br>Wt 9 - 10.6#/gal.<br>Vis 36-60 sec.<br>WL 4.5 - 12.2 cc<br>FC 1 - 7/32<br>pH 11-13 |

Contractor: Exeter Drilling Co.

Drillers: T. W. Keen
T. F. Manion
H. A. Sheppard

**CONDITION AT BEGINNING OF PERIOD**

| HOLE SIZE | HOLE FROM | HOLE TO | CASING SIZE | DEPTH SET |
|---|---|---|---|---|
| 11" | 0 | 1095 | 8-5/8" | 1079' |
| 7-7/8 | 1095 | 5705 | | |

DRILL PIPE SIZES 4-1/2"

C. MAC MASTER
SIGNED

DITCH SAMPLES

Examined by _____ 3670 to 4060
_____ to _____

Well Mole Hill #1
Field or Area Wildcat

| FROM | TO | % | SHOWS UNDERLINED — SAMPLES LAGGED NOT |
|---|---|---|---|
| 3670 | 3680 | 50 | Limestone, tan, I VFA. |
| | | 50 | Shale, as above. |
| 3680 | 3690 | 100 | Sandstone, light brown, very fine - siltstone, calcareous, anhydrite inclusions, micaceous. |
| 3690 | 3700 | 100 | Siltstone, light green, calcareous, anhydrite inclusions. |
| 3700 | 3800 | | Skip. |
| 3800 | 3810 | 100 | Siltstone, light brown, calcareous, slightly micaceous, Samples good. |
| 3810 | 3820 | | Skip. |
| 3820 | 3830 | 70 | Limestone, tan - dark brown, I VFA. |
| | | 30 | Siltstone, as above. |
| 3830 | 3850 | 100 | Siltstone, as above, anhydrite inclusions. |
| 3850 | 3860 | 100 | Shale, dark brown, slightly calcareous, slightly sandy, waxy. |
| 3860 | 3870 | 100 | Shale, as above, calcareous, sandy. |
| 3870 | 3880 | 100 | Limestone, tan - light brown, I VFA, sandy, with sandstone partings. |
| 3880 | 3890 | 100 | Limestone, as above, very sandy. |
| 3890 | 3910 | 100 | Sandstone, tan - pale purple, very fine - fine, finely sorted. |
| 3910 | 3920 | 100 | Siltstone, as above. |
| 3920 | 3930 | 50 | Limestone, medium brown, I VFA. |
| | | 50 | Shale, red, calcareous. |
| 3930 | 3940 | 100 | Limestone, as above. |
| 3940 | 3960 | 80 | Shale, as above. |
| | | 20 | Limestone, tan, I VFA, with chert 3940-50'. |
| 3960 | 3980 | 100 | Shale, red, mottled purple, calcareous. |
| 3980 | 4000 | 100 | Shale, variegated, red, green, gray, purple, very soft. |
| 4000 | 4020 | 100 | Shale, variegated, red, brown, green, gray, calcareous in part, with a limestone parting, white, I VFA. |
| 4020 | 4050 | 100 | Shale, red, slightly silty, calcareous, with limestone parting, tan, I VFA in 40-50. |
| 4050 | 4060 | | Skip. |

DITCH SAMPLES

Examined by _____ 4060 to 4535
_____ ____ to ____

Well Mole Hill #1
Field or Area Wildcat

| FROM | TO | % | SHOWS UNDERLINED — SAMPLES LAGGED NOT |
|---|---|---|---|
| 4060 | 4080 | 100 | Shale, brownish red, slightly silty, slightly calcareous, with occasional small anhydrite inclusions, Samples poor. |
| 4080 | 4120 | 100 | Shale, as above, without anhydrite inclusions. |
| 4120 | 4150 | 100 | Siltstone, brown, calcareous, Samples poor. |
| 4150 | 4180 | 100 | Shale, red, - brownish red, slightly calcareous. |
| 4180 | 4230 | 100 | Shale, variegated, reddish brown, tan, purple, soft, slightly calcareous. |
| 4230 | 4240 | 100 | Shale, brownish red, slightly calcareous. |
| 4240 | 4260 | 100 | Shale, brown, slightly silty, calcareous. |
| 4260 | 4310 | 100 | Shale, as above, Samples very poor. Limestone partings, tan, I VFA, in 90-4300. |
| 4310 | 4320 | 100 | Shale, variegated, reddish brown, light green, light gray, purple, slightly calcareous. |
| 4320 | 4330 | 100 | Shale, as above, calcareous. |
| 4330 | 4350 | 100 | Shale, brown, silty in part, calcareous. |
| 4350 | 4360 | | Skip. |
| 4360 | 4400 | 100 | Siltstone, light brown, calcareous, Samples good. |
| 4400 | 4420 | 100 | Shale, brown, silty, calcareous. |
| 4420 | 4450 | 100 | Limestone, tan, I/II VFA, slightly sandy, I LA in part. (TOP HERMOSA) |
| 4450 | 4460 | 40 | Siltstone, light gray, calcareous. |
| | | 60 | Limestone, as above. |
| 4460 | 4490 | 100 | Limestone, tan, III FA. |
| 4490 | 4500 | 100 | Limestone, light gray, III FA, (Samples still good.) |
| 4500 | 4510 | 40 | Limestone, tan, I VFA. |
| | | 60 | Shale, brown, calcareous. Samples poor. |
| 4510 | 4515 | 100 | Shale, brown, calcareous. |
| 4515 | 4520 | 60 | Shale, as above. |
| | | 40 | Limestone, tan - white, I VFA. |
| 4520 | 4535 | 100 | Shale, as above. Samples very poor. |

DITCH SAMPLES

Examined by _____ 4535 to 4760
_____ to _____

Well Mole Hill #1
Field or Area Wildcat

| FROM | TO | % | SHOWS UNDERLINED — SAMPLES TAGGED NOT |
|---|---|---|---|
| 4535 | 4540 | 30 | Limestone, tan, I VFA. |
| | | 70 | Shale, as above. |
| 4540 | 4545 | 100 | Shale, as above. |
| 4545 | 4550 | 40 | Limestone, white - tan, I VFA. |
| | | 60 | Shale, as above. (Samples still very poor) |
| 4550 | 4555 | 100 | Shale, as above. |
| 4555 | 4560 | 100 | Limestone, tan, I VFA, sandy - very sandy. Samples fair. |
| 4560 | 4565 | 100 | Limestone, white, I VFA, very sandy, grades to sandstone, very calcareous in part. |
| 4565 | 4570 | 40 | Limestone, tan, I VFA. |
| | | 60 | Shale, brown, slightly calcareous. Samples poor. |
| 4570 | 4585 | 100 | Limestone, tan, III VF-FA. |
| 4585 | 4610 | 100 | Limestone, white, I VF-LA, with occasional cherty fragments. |
| 4610 | 4615 | 100 | Shale, varicolored, brown, brown, red, gray, calcareous in part. (Samples still poor) |
| 4615 | 4620 | 100 | Shale, brown, calcareous. |
| 4620 | 4625 | 100 | Shale, light green, silty in part, calcareous. |
| 4625 | 4630 | 40 | Shale, as above. |
| | | 60 | Limestone, tan - light green, III F - I VFA, silty. |
| 4630 | 4635 | 100 | Limestone, as above. |
| 4635 | 4640 | 60 | Limestone, as above. |
| | | 40 | Siltstone, brown, calcareous. |
| 4640 | 4680 | 100 | Siltstone, as above. (Samples still poor) |
| 4680 | 4685 | 100 | Limestone, white, I LA, sandy in part. |
| 4685 | 4700 | 100 | Siltstone, brown, calcareous, grades to shale, brown, very silty in part. |
| 4700 | 4720 | | Skip. |
| 4720 | 4725 | 100 | Shale, light - medium brown, soft, slightly calcareous. |
| 4725 | 4760 | 100 | Shale, dark brown, silty in part, slightly calcareous. |

DITCH SAMPLES

Examined by _____ ____to ____
_____ ____to ____

Well Mole Hill #1
Field or Area _____

| FROM | TO | % | SHOWS UNDERLINED SAMPLES LAGGED |
|---|---|---|---|
| 4760 | 4770 | 40<br>60 | Limestone, white, IvFA, very sandy.<br>Shale, as above. |
| 4770 | 4790 | 100 | Shale, brown, light green, gray, red, calcareous, in part (Samples poor) |
| 4790 | 4850 | 100 | Limestone, white-tan, IvF-IIIFA, sandy in part. (Samples very poor) |
| 4850 | 4855 | 100 | Limestone, tan, IIIFA, sandy. |
| 4855 | 4865 | 100 | Shale, brown, calcareous. |
| 4865 | 4870 | 100 | Skip |
| 4870 | 4880 | 100 | Limestone, tan-white, IIIvF=FA, with occasional brown translucent chert fragments. |
| 4880 | 4885 | 60<br>40 | Shale, brown, calcareous.<br>Limestone, white-tan, IvFA. |
| 4885 | 4890 | 100 | Limestone, as above, sandy in part. |
| 4890 | 4895 | 100 | Limestone, tan, IvFA, sandy, with rare ostracod. (Samples poor). |
| 4895 | 4900 | 100 | Limestone, tan, IvF-LA, sandy in part, occasional foram. |
| 4900 | 4925 | 100 | Limestone, tan-white, I-IIIvFA, sandy in part. (Samples very poor) |
| 4925 | 4935 | 100 | Shale, varigated, brown, green, gray, silty in part, calcareous in part. |
| 4935 | 4945 | 100 | Limestone, tan, I-IIIvFA. |
| 4945 | 4960 | 100 | Limestone, tan-light brown, IIIvF-FA. |
| 4960 | 4985 | 100 | Limestone, tan-light gray, brown, I-IIIvFA. (Samples good) |
| 4985 | 4990 | 100 | Limestone, dark gray, IIIvFA, very argillaceous, may be very calcareous, shale in part. |
| 4990 | 4995 | 100 | Limestone, as above, dark gray, brown in part, IIIFA in part. |
| 4995 | 5000 | 100 | Limestone, as above, tan-dark gray brown. |
| 5000 | 5010 | 100 | Limestone, tan-light brown, IIIFA. |
| 5010 | 5015 | 100 | Limestone, tan-light gray, IIIFA. |
| 5015 | 5025 | 100 | Limestone, white-light tan, IvFA, sandy in part with milky, translucent chert. |
| 5025 | 5030 | 100 | Limestone, light tan-light brown, I-IIIvFA, (Samples good). |
| 5030 | 5035 | 100 | Limestone, light tan-light brown, I-IIIvFA. |

DITCH SAMPLES

Examined by _____ 5035 to 5280
_____ ____ to ____

Well Mole Hill #1
Field or Area Wildcat

| FROM | TO | % | SHOWS UNDERLINED SAMPLES LAGGED NOT |
|---|---|---|---|
| 5035 | 5050 | 100 | Limestone, medium - dark grayish brown, I - III VFA, with brachiodpod?, fragments and spines. |
| 5050 | 5065 | 100 | Limestone, dark grayish brown, I - III VFA, argillaceous, pyritic in part, with rare bryozoa. |
| 5065 | 5085 | 100 | Limestone, tan, I VFA-$B_1$, and limestone as above, (apparently interbedded) 1-2% bright yellow fluorescence and cut fluorescence. |
| 5085 | 5100 | 100 | Limestone, tan - white, I VFA. |
| 5100 | 5120 | 100 | Limestone, tan - light brown, I - III VFA. |
| 5120 | 5125 | 100 | Limestone, tan - light gray, III VFA. |
| 5125 | 5135 | 100 | Limestone, as above, becoming III FA. (Samples still good) |
| 5135 | 5140 | 100 | Limestone, white, I VF - III FA, very sandy. |
| 5140 | 5145 | 40 | Limestone, as above. |
| | | 60 | Shale, medium - dark gray, calcareous. |
| 5145 | 5155 | 100 | Shale, as above. |
| 5155 | 5160 | 60 | Shale, as above. |
| | | 40 | Limestone, white, I VFA, sandy in part. |
| 5160 | 5165 | 100 | Shale, medium gray, calcareous in part. |
| 5165 | 5170 | 100 | Limestone, tan - light brown, I VF - MA. |
| 5170 | 5175 | 100 | Siltstone, pale greenish gray, micaceous, calcareous. |
| 5175 | 5185 | 40 | Siltstone, brown, micaceous, calcareous. |
| | | 60 | Limestone, light brown, I VFA. |
| 5185 | 5195 | 100 | Limestone, tan, I III VFA. |
| 5195 | 5205 | 100 | Limestone, light grayish brown, III VF - FA. |
| 5205 | 5225 | 100 | Limestone, tan, I VFA. |
| 5225 | 5235 | 60 | Limestone, as above. |
| | | 40 | Shale, medium - dark gray, calcareous in part. |
| 5235 | 5240 | 100 | Limestone, brown, I VFA, with tan - brown, translucent cherty fragments. |
| 5240 | 5250 | | Skip |

DITCH SAMPLES

Examined by _____ 5280 to 5360
_____ ____ to ____

Well Mole Hill #1
Field or Area Wildcat

| FROM | TO | % | SHOWS UNDERLINED SAMPLES LAGGED NOT |
|---|---|---|---|
| 5280 | 5295 | 100 | Limestone, tan - light brown, I VFA, sandy in part. |
| 5295 | 5300 | 100 | Limestone, tan, I VFA, with occasional tan cherty fragments. |
| 5300 | 5305 | 100 | Limestone, tan, I VFA, sandy. |
| 5305 | 5320 | 100 | Limestone, as above, not sandy. |
| 5320 | 5325 | 100 | Limestone, tan - light brown, I VFA, with light brown, translucent cherty fragments. |
| 5325 | 5330 | 100 | Limestone, light grayish brown, I VFA. |
| 5330 | 5345 | 100 | Limestone, as above, with chert as above. |
| 5345 | 5350 | 70 | Limestone, tan, I VFA. |
| | | 30 | Shale, dark gray, calcareous. |
| 5350 | 5360 | 100 | Limestone, tan - light brown, I VFA, sandy. |

PD 4-B 8-50

**SHELL OIL COMPANY**

WEEK ENDING_____

CORE FROM_____ TO_____

CORES EXAMINED BY_____

# CORE RECORD

AREA OR FIELD Wildcat

COMPANY Shell

LEASE AND WELL NO. Mole Hill #1

| NO. | FROM | TO | RECOV-ERED | FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE | SYMBOL | OBSERVED DIP | CORE INDICATION OIL—GAS / CORE OR DIT |
|---|---|---|---|---|---|---|---|
| 1 | 5408 | 5409 | 1' | Limestone, brown, III VF-FA-$B_2$, shows as above. | | | See Descr |
| | 5409 | 5410 | 1' | Limestone, dark brown, III VF-FA, very fusulinid, with abundant brachiopod and crinoid. 2-4% bright yellow spotty fluorescence and cut fluorescence. | | | |
| | 5410 | 5411 | 1' | Limestone, tan - light brown, I LA, with rare fusulinid and bryozoa. | | | |
| | 5411 | 5412 | 1' | Limestone, dark brown, III VF-FA, argillaceous, fusulinid. 1% bright yellow spotty fluorescence and cut fluorescence. | | | |

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

4-B 8.50

SHELL OIL COMPANY

WEEK ENDING

CORE FROM TO

CORES EXAMINED BY

# CORE RECORD

AREA OR FIELD Wildcat

COMPANY Shell

LEASE AND WELL NO. Mole Hill #1

| FROM | TO | RECOVERED | FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE | SYMBOL | OBSERVED DIP | CORE INDICATIONS OIL—GAS / CORE OR DITCH |
|---|---|---|---|---|---|---|
| 5412 | 5457.5 | 40.5' | | | | See Description |
| 5412 | 5416 | 4' | Limestone, medium brown, I F-MA, with abundant fusulinid. | | | |
| 5416 | 5422 | 6' | Limestone, dark brown, III FA, very argillaceous, with abundant fusulinid. | | | |
| 5422 | 5429 | 7' | Limestone, medium brown, I VF-FA, with crinoids and fusulinid, black cherty nodules at 5425. | | | |
| 5429 | 5430 | 1' | Limestone, dark brown, III VFA, argillaceous, with crinoid stems. | | | |
| 5430 | 5446 | 16' | Limestone, medium brown, I-III VF-FA, argillaceous, with 2" cherty nodules at 5433. | | | |
| 5446 | 5452.5 | 6.5' | Limestone, as above, with abundant irregular small black cherty nodules. | | | |

MBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

4-B 8-50

SHELL OIL COMPANY

WEEK ENDING

CORE FROM TO

CORES EXAMINED BY

# CORE RECORD

AREA OR FIELD Wildcat

COMPANY Shell

LEASE AND WELL NO. Mole Hill #1

| FROM | TO | RECOVERED | FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE | SYMBOL | OBSERVED DIP | CORE INDICATIONS OIL—GAS / CORE OR DITCH |
|---|---|---|---|---|---|---|
| 5460 | 5510 | 47.5' | | | | See Description |
| 5460 | 5461 | 1' | Limestone, black, I VFA, very argillaceous, with rare crinoid button. | | | |
| 5461 | 5462 | 1' | Limestone, tan - light gray, I VFA. | | | |
| 5462 | 5464 | 2' | Limestone, medium grayish brown, I-III FA, argillaceous, with abundant fusulinids at 62-63 | | | |
| 5464 | 5464.5 | 0.5' | Shale, black. | | | |
| 5464.5 | 5465.5 | 1' | Limestone, medium brown, III - I FA, with calcite veins. | | | |
| 5465.5 | 5467 | 1.5' | Shale, black, silty. | | | |
| 5467 | 5472 | 5' | Limestone, medium gray, III F-MA, very argillaceous - argillaceous, silty. | | | |
| 5472 | 5473 | 1' | Shale, medium gray, very silty, micaceous. | | | |
| 5473 | 5474 | 1' | Limestone, medium gray, III F-MA, argillaceous, very silty. | | | |
| 5474 | 5475 | 1' | Shale, medium gray, very silty, micaceous, calcareous. | | | |
| 5475 | 5477 | 2' | Siltstone, medium gray, very calcareous, argillaceous, with patches I VFA limestone. | | | |
| 5477 | 5478 | 1' | Limestone, medium brown, I VFA, with clusters course calcite crystals, with light brown oil stain. | | | |
| 5478 | 5479 | 1' | Limestone, light brown, I VF-FA, with brachiopod fragments. | | | |
| 5479 | 5484.5 | 5.5' | Limestone, light grayish brown, IF-MA, slightly argillaceous, with abundant fusulinids. | | | |
| 5484.5 | 5488 | 3.5 | Limestone, light gray, III FA, very dolomitic, petroleum odor on fresh core. | | | |
| 5488 | 5489 | 1' | Limestone, light gray, III F-$B_5$, with 50% light blue fluorescence, pale cut fluorescence. | | | |
| 5489 | 5490 | 1' | Limestone, light gray - brown, III-I F-$LB_1$, + trace C, dolomitic, 50% bright blue yellow fluorescence, moderate yellow cut fluorescence. | | | |
| 5490 | 5491 | 1' | Dolomite, tan - light gray, III F $B_{1-2}$, + trace C. | | | |
| 5491 | 5492 | 1' | Limestone, tan - light gray, III F $B_{1-2}$, dolomitic, 50% bright blue yellow fluorescence, pale yellow cut fluorescence. | | | |
| 5492 | 5493 | 1' | Limestone, light gray, I-III VF-FA. | | | |
| 5493 | 5494 | 1' | Limestone, tan, III FA, dolomitic. | | | |
| 5494 | 5495 | 1' | Limestone, as above, very dolomitic. | | | |
| 5495 | 5496 | 1' | Dolomite, dark brown - black, III FA, argillaceous<br>TOP PARADOX 5496' | | | |
| 5496 | 5507 | 11' | Shale, black, slightly silty calcareous. Bed contacts gradational, no evidence of dip. | | | |

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

D 4-B 8-50

SHELL OIL COMPANY

WEEK ENDING

CORE FROM TO

CORES EXAMINED BY

# CORE RECORD

AREA OR FIELD Wildcat

COMPANY Shell

LEASE AND WELL NO. Mole Hill #1

| FROM | TO | RECOVERED | FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE | SYMBOL | OBSERVED DIP | CORE INDICATIONS OIL—GAS / CORE OR DITCH |
|---|---|---|---|---|---|---|
| 5510 | 5560 | 50' | | | | See Description |
| 5510 | 5541 | 31' | Shale, black, slightly calcareous. | | | |
| 5541 | 5542.5 | 1.5' | Limestone, medium grayish brown, III VFA, argillaceous. | | | |
| 5542.5 | 5544.5 | 2' | Dolomite, light brownish gray, III MA, calcareous, very silty, 3-5° dip from thin irregular interbeds. | | | |
| 5544.5 | 5548 | 3.5' | Siltstone, medium gray, calcareous, argillaceous - grading to very fine sand, micaceous. | | | |
| 5548 | 5549 | 1' | Siltstone, as above, very argillaceous. | | | |
| 5549 | 5550 | 1' | Shale, medium gray. | | | |
| 5550 | 5551 | 1' | Dolomite, medium brown, III VF-FA, 20% bright yellow fluorescence (spotty). | | | |
| 5551 | 5552 | 1' | Limestone, medium gray, I-III FA, oil bleeding along very thin tight horizontal fractures at 50.5-51. | | | |
| 5552 | 5560 | 8' | Anhydrite, gray, with thin irregular black shale partings. | | | |

SYMPOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

D 4-B 8-50

**SHELL OIL COMPANY**

WEEK ENDING_____

CORE FROM_____ TO_____

CORES EXAMINED BY_____

# CORE RECORD

AREA OR FIELD Wildcat

COMPANY Shell

LEASE AND WELL NO. Mole Hill #1

| FROM | TO | RECOV-ERED | FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE | SYMBOL | OBSERVED DIP | CORE INDICATIONS OIL—GAS / CORE OR DITCH |
|---|---|---|---|---|---|---|
| 5560 | 5612 | 52' | | | | See Description |
| 5560 | 5561.7 | 1.7' | Anhydrite, gray, massive. | | | |
| 5561.7 | 5570 | 8.3' | Dolomite, medium brown, III FA. Very pale blue fluorescence on fractured surface at 69-70. | | | |
| 5570 | 5571 | 1' | Dolomite, as above, calcareous. | | | |
| 5571 | 5578 | 7' | Siltstone, gray, calcareous. | | | |
| 5578 | 5579 | 1' | Shale, light gray, calcareous. | | | |
| 5579 | 5588 | 7' | Limestone, tan, I VFA, sandy, abundant fusulinids at 85-88. | | | |
| 5588 | 5590 | 2' | Limestone, tan, I VFA, with abundant fusulinids and irregular gray shale partings. | | | |
| 5590 | 5591 | 1' | Limestone, tan, I VFA, with irregular gray shale partings. | | | |
| 5591 | 5593 | 2' | Limestone, tan, I VFA, with clusters white anhydrite crystals and gray shale partings. | | | |
| 5593 | 5594 | 1' | Limestone, tan, I VFA, with round anhydrite inclusions. | | | |
| 5594 | 5595 | 1' | Shale, medium gray, calcareous, with inclusions I VFA, tan, limestone. | | | |
| 5595 | 5596 | 1' | Dolomite, tan, III FA, with round anhydrite inclusions. | | | |
| 5596 | 5597.5 | 1.5' | Limestone, tan, III FA, with round anhydrite inclusions. | | | |
| 5597.5 | 5598 | 0.5' | Limestone, tan, I-III VF-FA, with trace C. 40% yellow fluorescence, pale cut fluorescence. Abundant small smooth brachiopods, few fusulinids. | | | |
| 5598 | 5599 | 1' | Limestone, as above, $B_1 + C_1$, 20% fluorescence, and cut fluorescence as above. | | | |
| 5599 | 5600 | 1' | Limestone, tan, I $FB_1 + C_1 + D_1$, 30% dull yellow fluorescence, very pale yellow cut fluorescence. | | | |
| 5600 | 5601 | 1' | Limestone, tan, III FA, with trace C and D, 5% fluorescence as above, stylolitic. | | | |
| 5601 | 5602 | 1' | Limestone, as above, fluorescence as above. | | | |
| 5602 | 5603 | 1' | Limestone, as above, 40% pale yellow fluorescence, very pale yellow cut fluorescence, abundant small smooth brachiopods. | | | |
| 5603 | 5604 | 1' | Limestone, tan, III $FB_1 + C_2 + D_1$, appears brecciated, with abundant brachiopods and fossile fragments, large crystals and plates of anhydrite; 45% fluorescence and cut fluorescence, as above. | | | |
| 5604 | 5605 | 1' | Limestone, as above, 25% fluorescence and cut fluorescence as above. | | | |
| 5605 | 5606 | 1' | Limestone, light gray - tan, I VF-LA, with abundant course anhydrite crystals. | | | |

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

D 4-B 8-50

**SHELL OIL COMPANY**

WEEK ENDING_____

CORE FROM_____ TO_____

CORES EXAMINED BY_____

# CORE RECORD

AREA OR FIELD Wildcat

COMPANY Shell

LEASE AND WELL NO. Mole Hill #1

| FROM | TO | RECOVERED | FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE | SYMBOL | OBSERVED DIP | CORE INDICATIONS OIL—GAS / CORE OR DITCH |
|---|---|---|---|---|---|---|
| 5612 | 5656 | 41' | | | | None |
| 5612 | 5617 | 5' | Dolomite, medium brown, III F-MA, at 14-16, abundant brachiopod fossils. | | | |
| 5617 | 5619 | 2' | Dolomite, tan, III MA, anhydritic. | | | |
| 5619 | 5620 | 1' | Dolomite, tan, III F-M $B_1$, with inclusions of anhydrite, light oil stain. | | | |
| 5620 | 5621 | 1' | Dolomite, tan, III FA, very calcareous, with irregular gray shale partings. | | | |
| 5621 | 5622 | 1' | Dolomite, as above, $B_1$ + trace C. | | | |
| 5622 | 5624 | 2' | Dolomite, as above, $B_1$ + trace C., with patches brown III MA dolomitic, anhydritic. | | | |
| 5624 | 5625 | 1' | Dolomite, medium brown, III F-MA, anhydritic. | | | |
| 5625 | 5626 | 1' | Dolomite, medium brown, very calcareous, with patches light gray shale. | | | |
| 5626 | 5627 | 1' | Dolomite, mottled tan and medium brown, III FA, very calcareous, with rare brachiopod mold and anhydrite inclusions. | | | |
| 5627 | 5629 | 2' | Dolomite, medium brown, III FA, with rare anhydrite inclusions. | | | |
| 5629 | 5633 | 4' | Dolomite, as above, very calcareous, with rare brachiopod. | | | |
| 5633 | 5634 | 1' | Limestone, medium brown, III FA, very dolomitic, with rare brachiopod. | | | |
| 5634 | 5637 | 3' | Dolomite, medium brown, calcareous, with rare crinoid stems. | | | |
| 5637 | 5638 | 1' | Dolomite, medium brown, III FA, calcareous, argillaceous. | | | |
| 5638 | 5639 | 1' | Shale, black, very dolomitic, with abundant productid brachiopods. | | | |
| 5639 | 5653 | 14' | Shale, black, slightly calcareous. | | | |
| | | | Note: Drillers measured T. D. 6550' | | | |

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

) 4-B 8-50

SHELL OIL COMPANY

WEEK ENDING

CORE FROM TO

CORES EXAMINED BY

# CORE RECORD

AREA OR FIELD Wildcat

COMPANY Shell

LEASE AND WELL NO. Mole Hill #1

| FROM | TO | RECOV-ERED | FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE | SYMBOL | OBSERVED DIP | CORE INDICATIONS OIL—GAS / CORE OR DITCH |
|---|---|---|---|---|---|---|
| 5606 | 5607 | 1' | Limestone, light gray, I VFA, trace C and D, recemented with course anhydrite crystals. 20% yellow fluorescence, strong yellow cut fluorescence. | | | See Description |
| 5607 | 5608 | 1' | Limestone, as above, 10% fluorescence and cut fluorescence, as above. | | | |
| 5608 | 5609 | 1' | Limestone, as above, 10% fluorescence and cut fluorescence, as above, only trace D porosity. | | | |
| 5609 | 5610 | 1' | Limestone, tan-light gray, I VFA to III MA, due to presence of anhydrite crystals. | | | |
| 5610 | 5611 | 1' | Limestone, light gray, I VFA, with inclusions course anhydrite crystals. | | | |
| 5611 | 5612 | 1' | Dolomite, tan, III FA, anhydritic. | | | |

SYMPOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

DITCH SAMPLES

Examined by _____ 5660 to 5701
_____ ____ to ____

Well Mole Hill #1
Field or Area Wildcat

| FROM | TO | % | SHOWS UNDERLINED | SAMPLES LAGGED NOT |
|---|---|---|---|---|
| 5660 | 5665 | | Skip. | |
| 5665 | 5670 | 100 | Shale, black, calcareous. | |
| 5670 | 5675 | 50 | Shale, as above. | |
| | | 25 | Shale, light gray, calcareous. | |
| | | 25 | Limestone, tan, I VFA. | |
| 5675 | 5680 | 100 | Siltstone, gray, calcareous. | |
| 5680 | 5685 | 50 | Anhydrite | |
| | | 50 | Limestone, brown, I VFA. | |
| 5685 | 5690 | 25 | Anhydrite | |
| | | 50 | Limestone, as above. | |
| | | 25 | Shale, light gray, calcareous. | |
| 5690 | 5695 | 75 | Siltstone, gray. | |
| | | 25 | Dolomite, brown, III FA. | |
| 5695 | 5700 | 100 | Anhydrite | |
| 5700 | 5701 | 100 | Salt | |

DITCH SAMPLES

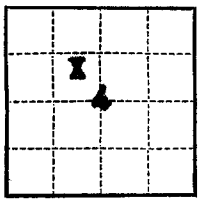
Examined by _____ 3100 to 3670
_____ to _____

Well Mole Hill # 1
Field or Area Wildcat

| FROM | TO | % | SHOWS UNDERLINED SAMPLES LAGGED NOT |
|---|---|---|---|
| 3100 | 3110 | 100 | Shale, orange, calcareous, silty. |
| 3110 | 3130 | 100 | Siltstone, orange, calcareous. |
| 3130 | 3150 | 100 | Shale, orange, calcareous. |
| 3150 | 3200 | 100 | Shale, orange, mottled green, moderately calcareous, silty. |
| 3200 | 3300 | 100 | Shale, as above, very calcareous. |
| 3300 | 3320 | 100 | Shale, reddish brown, very calcareous, anhydritic, silty. |
| 3320 | 3340 | 100 | Shale, light green. |
| 3340 | 3350 | 100 | Shale, as above, anhydrite inclusions. |
| 3350 | 3360 | 20 | Shale, as above. |
| | | 80 | Siltstone, brown, calcareous, micaceous, anhydrite inclusions. |
| 3360 | 3380 | 10 | Shale, as above. |
| | | 90 | Siltstone, as above. |
| 3380 | 3400 | 100 | Shale, brown, calcareous, with anhydrite inclusions. |
| 3400 | 3410 | | Skip. |
| 3410 | 3430 | 100 | Shale, as above. |
| 3430 | 3470 | 100 | Siltstone, as above, very calcareous. |
| 3470 | 3480 | | Skip. |
| 3480 | 3500 | 100 | Siltstone, as above. |
| 3500 | 3520 | 100 | Shale, orange and green, calcareous. |
| 3520 | 3570 | 100 | Siltstone, tan, as above. |
| 3570 | 3600 | 100 | Sandstone, light brown, very fine siltstone, angular, well sorted, very calcareous, anhydrite inclusions, micaceous. |
| 3600 | 3610 | 100 | Shale, reddish brown, calcareous, silty, anhydrite inclusions. |
| 3610 | 3630 | 100 | Siltstone, brown, calcareous, anhydrite inclusions, micaceous. |
| 3630 | 3640 | 100 | Shale, red, slightly calcareous, slightly sandy. |
| 3640 | 3650 | 100 | Siltstone, as above. |
| 3650 | 3670 | 100 | Shale, brown, calcareous, silty, micaceous. |

Form 9-331 b
(April 1952)

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.



*(SUBMIT IN TRIPLICATE)*

**UNITED STATES**
**DEPARTMENT OF THE INTERIOR**
**GEOLOGICAL SURVEY**

Indian Agency Navajo

Allottee Tribal Lands

Lease No. 14-20-603-242

H

# SUNDRY NOTICES AND REPORTS ON WELLS 1-27-58

| | | | |
|---|---|---|---|
| NOTICE OF INTENTION TO DRILL | | SUBSEQUENT REPORT OF WATER SHUT-OFF | |
| NOTICE OF INTENTION TO CHANGE PLANS | | SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING | |
| NOTICE OF INTENTION TO TEST WATER SHUT-OFF | | SUBSEQUENT REPORT OF ALTERING CASING | |
| NOTICE OF INTENTION TO REDRILL OR REPAIR WELL | | SUBSEQUENT REPORT OF REDRILLING OR REPAIR | |
| NOTICE OF INTENTION TO SHOOT OR ACIDIZE | | SUBSEQUENT REPORT OF ABANDONMENT | X |
| NOTICE OF INTENTION TO PULL OR ALTER CASING | | SUPPLEMENTARY WELL HISTORY | |
| NOTICE OF INTENTION TO ABANDON WELL | | | |

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

January 14, 19 58

Mole Hill
Well No. #1 is located 2691 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 4

| NW 4 | 41S | 23E | SLBM |
|---|---|---|---|
| (¼ Sec. and Sec. No.) | (Twp.) | (Range) | (Meridian) |

| Wildcat | San Juan | Utah |
|---|---|---|
| (Field) | (County or Subdivision) | (State or Territory) |

The elevation of the ~~derrick floor~~ Kelly Bushing above sea level is 4670 ft.

## DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Abandonment Work:
1. Plugged as follows:
   35 sacks cement at 5350'
   35 sacks cement at 4500'
   35 sacks cement at 2400'
   60 sacks cement at 1085'
2. Found top of cement at 975'.
3. Plugged casing with 10 sacks cement cap, installed marker and abandoned in accordance with USGS's regulations.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address 101 South Behrend

Farmington, New Mexico

Original signed by
By B. W. SHEPARD

Title B. W. Shepard
Exploitation Engineer

U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8

5